

What Is Claimed Is:

1 5. 1. An inflatable product, including:

2 a chamber;

3 an air pump for inflating the chamber, the air pump having
4 an air intake and an air outlet, wherein:

5 the air intake is connected to the outside of the chamber
6 and the air outlet is connected to the inside of the chamber when
7 the air pump is moved to first position; and

8 the air intake is connected to the inside of the chamber and
9 the air outlet is connected to the outside of the chamber when
10 the air pump is moved to second position.

11 2. An inflatable product as claimed in claim 1, wherein the
12 air pump further has a substantially rolling-pin-shaped housing,
13 a fan and motor provided in the housing.

14 3. An inflatable product as claimed in claim 2, wherein the
15 substantially rolling-pin-shaped housing has two ends, and the
16 air intake and the air outlet are respectively provided on the
17 ends of the housing.

18 4. An inflatable product as claimed in claim 1, further
19 including a piping system connected between the air intake of the
20 air pump and the outside of the chamber when the air pump is moved
21 to the first position, and connected between the air outlet of
22 the air pump and the outside of the chamber when the air pump is
23 moved to the second position.

24 5. An air pump assembly including:

2 a housing having a first air intake, a first air outlet, a
3 second air intake and a second air outlet;

4 a switching pipe;

5 a fan and motor for inflating air from the first air intake
6 to the second air outlet via the switching pipe when the switching
7 pipe is switched to first position, and for inflating air from
8 the second air intake to the first air outlet via the switching
9 pipe when the switching pipe is switched to second position.

1 6. An air pump assembly as claimed in claim 5, wherein the
2 air is pumped from the second air intake through the first air
3 intake to the first air outlet when the switching pipe is switched
4 to the second position.

5 7. An air pump assembly as claimed in claim 6, further
6 including a flap firmly fixed to the switching pipe, so as to close
7 the second air outlet when the switching pipe is switched to
8 connect the first air intake and the second air intake.

1 8. An inflatable product, including:

2 a first chamber;

3 a pack having an air intake connected to the outside of the
4 first chamber and a first air outlet connected to the inside of
5 the first chamber;

6 a fan and motor received in the pack for inflating air from
7 the outside of the first chamber through the air intake into the
8 pack and then from the air outlet into the the first chamber.

1 9. An inflatable product as claimed in claim 8, further
2 including a second chamber, and the pack further having a second

3 air outlet connected to the second chamber so that the fan and
4 motor pump air into the second chamber through the second air
5 outlet.

1 10. An inflatable product as claimed in claim 9, further
2 including a first valve for opening and closing the first air
3 outlet, a second valve for opening and closing the second air
4 outlet, and a valve switch to selectively open the first valve
5 or the second valve.

1 11. An inflatable product as claimed in claim 8, further
2 including a second chamber and a two-way valve device connected
3 between the first and second chambers so that the air in the first
4 chamber flows into the second chamber through the two-way valve
5 device.

1 12. An air mattress, including:
2 a mattress pad;
3 a back support to raise a part of the mattress pad, the back
4 support having a V-shaped cross section.

1 13. An air mattress, including:
2 a mattress pad;
3 a back support to raise a part of the mattress pad, the back
4 support having a flexible chamber and a holding element binding
5 the flexible chamber.

1 14. An air mattress as claimed in claim 13, wherein the back
2 support further has a frame firmly fixed to the flexible chamber

1 15. An air mattress as claimed in claim 14, wherein the back
2 support further has at least one slider mounted on the frame, via
3 which the frame slides on the ground.

1 16. An air mattress as claimed in claim 13, wherein the back
2 support further has at least two frames hinged together, with the
3 flexible chamber sandwiched therebetween.

a first chamber;⁷¹¹

a first valve; ⁷³¹¹

an air pump for inflating the first chamber through the first valve;

a first switch for activating the air pump and opening the first valve.

~~18. An inflatable product as claimed in claim 17, further including a switch circuit through which the air pump is activated by the first switch.~~

19. An inflatable product as claimed in claim 18, wherein the switch circuit has a microswitch turned on by the first switch when the first switch is turned on, and a relay activated to supply the air pump with power when the microswitch is turned on.

20. An inflatable product as claimed in claim 18, wherein
the switch circuit has an air bulb and a pressure switch, the first

3 switch is turned on to press the air bulb, and the pressure switch
4 is turned on by the air bulb to activate the air pump when the
5 air bulb is pressed by the first switch.

1 21. An inflatable product as claimed in claim 17, further
2 including:

3 a second chamber;

4 a second valve through which the air pump inflates the second
5 chamber;

6 the control pack further having a second switch to activate
7 the air pump and open the second valve.

8 22. An inflatable product as claimed in claim 21, wherein
the air pump has a first pair of electrodes and a second pair of
electrodes, the air pump operating in a first direction when the
first pair of electrodes contact each other, the air pump
operating in a second, reverse direction opposite to the first
direction when the second pair of electrodes contact each other,
and the first switch controls the air pump to operate, and the
second switch also controls the air pump to operate.

1 23. An inflatable product as claimed in claim 22, further
2 including a slider connected to the first and second pairs of
3 electrodes and provided beside the first and second switches in
4 such a way that the air pump is activated by the first switch and
5 the second switch via the slider.

1 24. An inflatable product as claimed in claim 17, wherein
2 the inflatable product is an umbrella.

1 25. An inflatable product as claimed in claim 24, further
2 including a stiff handle, and the first switch is provided on the
3 handle.

1 26. An inflatable product as claimed in claim 25, wherein
2 the first switch is ring-shaped and provided around the handle.

1 27. An inflatable product as claimed in claim 17, wherein
2 the air pump has bellows, a link connected to the bellows, a
3 plurality of gears connected to the link, and a motor connected
4 to the plurality of gears for operating the bellows to inflate
5 the first chamber.
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1 28. An inflatable product as claimed in claim 17, wherein
2 the air pump has a cylindrical reservoir, an air pressure rotator
3 eccentrically provided in the reservoir, and a motor provided
4 outside the reservoir to rotate the air pressure rotator and thus
5 inflate the first chamber.
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